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Undergraduate Students' Perceptions of Teaching Quality in Higher Education

Üniversitedeki Lisans Ögrencilerinin Ögretimin Kalitesine İlişkin Algıları

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Abstract

The purpose of this study was to examine undergraduate students' perceptions of teaching quality. The first aim is to adapt the "Course Experience Questionnaire (SCEQ)" scale developed by Ginns, Prosser and Barrie (2007). The second aim is to compare undergraduate students' studying at five faculties of Adıyaman university as well as students from faculties of education at five different universities. A scanning method was used in the study. Translation validity was used through back translation method. Exploratory factor analysis and confirmatory factor analysis were used for reliability and validity of the scale. The Cronbach's alfa was determined as 0.83. The scale, adapted to the Turkish context through SPSS and Lisrel. The scale was conducted on 1415 undergradute students studying at five different universities. Students' perceptions did not differ with regards to teaching quality at faculties of education at universities whether be a newly founded one or not. Students' perceptions also revealed no significant problem in teaching quality at faculties of education.

Keywords: Higher education, teaching quality, cultural adaptation.

Öz

Bu araştırmanın iki amacı vardır. Birincisi, Ginns, Prosser ve Barrie (2007) tarafından geliştirilen "Öğrencilerin Ders Deneyimleri" ölçeğini Türkçeye uyarlamaktır. İkincisi ise, ölçeğin yeni formu kullanılarak lisans öğrencilerin algılarına göre, Adıyaman Üniversitesi'nin farklı birimleri ile beş üniversitenin eğitim fakültelerindeki öğretimin kalitesini belirlemeyi amaçlamaktadır. Araştırmada tarama modeli kullanılmıştır. Ölçeğin dilsel eşdeğerliğinin sağlanmasında geri çeviri yöntemi kullanılmıştır. Ölçeğin geçerlilik ve güvenirlik çalışmaları, açımlayıcı ve doğrulayıcı faktör analizleri ile yapılmış ve bu sürece 862 öğrenci katılmıştır. Ölçeğin Cronbach Alfa güvenirlik katsayısı 0.83 olarak bulunmuştur. Verilerin analizinde SPSS ve Lisrel paket programları kullanılmıştır. Ölçek beş farklı üniversiteden 1415 öğrenciye uygulanmıştır. Araştırma sonucunda, hem yeni kurulan hem de gelişmekte olan üniversitelerin eğitim fakülteleri arasında öğretimin kalitesi yönünden bir farklılığın olmadığı belirlenmiştir. Öğrencilerin algılarına göre eğitim fakültelerinde kalite sorunu bulunmaktadır.

Anahtar Sözcükler: Yükseköğretim, öğretim kalitesi, kültürel uyarlama.

Introduction

In an era when internalization and technological developments are affecting pedagogical approaches, transforming the role of academicians and pressurising higher education leaders to "internationalize their institutions for economic, political, academic, and sociocultural rationales" (De Wit, 2002; Knight, 1994; 1999), higher education faces many challenges. Within this "supercomplexity" (Barnett, 2000) teaching is day by day becoming more demanding (Brown and Atkins, 1991). Higher education institutions have attempted to meet the demands of the

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international market by developing graduates who are competent in many areas. Trow (2005) argues that this attempt to supply a competent work force for the competitive market has led institutions to transform themselves from elite to mass systems of higher education. Pennington (1994) notes that universities can no longer avoid reviewing their mechanisms in relation to teaching and learning processes. In this context, curriculum, teaching, learning opportunities, research opportunities, interdisciplinary programs and curricula require careful consideration and analysis (Klein, 1990; Pennee, 2007; Helfand, 2010; Brint et al., 2009).

Lee Dow (2008: p. 4) asserts that the importance attached to high quality teaching has increased in recent years. Teaching quality is associated with students' learning and teaching experiences. Vermeulen and Schmidt (2008), note that the university setting is aligned with "interaction and the curriculum". As Kehm (2006), Massy (2005) and Dill (2010) found in their examination of external assessment practices, student learning becomes more effective when collaboration is created among lecturers and students. Further, Tinto's 'Social Integration Model' (1975) emphasizes the value of social and academic integration to university students and Sander et al. (2000) indicated that when students' expectations are met drop out rates decrease significantly, while Duff et al. (2003) suggest that personality traits such as extraversion, conscientiousness and openness to experience correlate positively with academic success. Moreover Read, Archer and Leathwood (2003) argue that the degree to which students feel involved with the academic culture is itself determined by the academic culture. Bakioğlu and Hacıfazlıoğlu (2010) examined undergraduate students' perceptions of teaching quality through the dimensions of integration and interaction, something to which academia has previously attached importance (Kuh & Hu, 2001). It can be argued that higher education teaching has moved into a new paradigm, where students are not only the receivers of knowledge but also the inquirers and the practitioners of it.

There have been various attempts to maintain quality assurance at universities, for example, the European Network for Quality Assurance. Despite it can be difficult to distinguish between quality control and quality assurance (Hopkin, 1999) if institutions are to take increasing responsibility for their own institutional, academic and professional development, they need to develop mechanisms to support quality maintenance. In other words, although quality assurance systems are effective through the support of external professional agencies, self evaluation still serves as one of the main pillars of quality in an institution. Ryan and Fraser (2010), in their discussion on the discipline of professional development for the learning and teaching roles of academics give educational development a crucial role and argue that it should be incorporated into all levels of the institution starting with individuals at faculties, departments and the whole university.

While university lecturers' approaches to teaching have been examined within the arena of higher education teaching (Middlehurst, 1993; Wright & O'Neill, 1995; Prosser & Trigwell, 1999, 2006; Entwistle et al., 2000; Entwistle & Walker, 2002; Ramsden, 2003; Biggs, 2003), there is a scarcity of in-depth data about teaching quality in Turkey. This article attempts to reddress this imbalance and provides insights for scholars and practitioners in higher education as well as providing a valid and reliable instrument for the Turkish higher education context.

The purpose of this study was to examine undergraduate students' perceptions of teaching quality. With this purpose the study sought answers to the sub research questions below:

- To what extent can the Student Course Experience Questionnaire (SCEQ), the scale developed by Ginns, Prosser and Barrie (2007), be applicable to the Turkish case?
- To what extent do undergraduate students' perceptions of teaching quality differ with regards to gender, university, grade, faculty and GPA variables?

This study had three aims. The first was to adapt the "Students' Perceptions of Teaching Quality Scale", developed by Ginns, Prosser and Barrie (2007), into Turkish and to develop a valid and reliable measurement tool. The second aim was to determine students' perceptions of teaching quality with regards to students' gender, university, class, faculty and cumulative variables. Finally, the study aim at discover teaching quality by comparing results from other countries based on students' perceptions in higher education.

Method

The study used a general scanning method. A quantitative method was conducted in this study. Data was collected through a scale adapted into Turkish by the researcher.

Working Group

The working group was determined through purposive sampling, which is a useful option when the desired population for the study is rare or very difficult to locate and recruit. The advantage of this method is that the researcher can use prior knowledge to choose respondents (Bailey, 1994, p. 96).

An exploratory factor analysis was conducted on 382 undergraduate students: 190 from the Health Vocational School at Adıyaman University; 52 from Çoruh Faculty of Education; 55 from Mersin University; and 85 from Yıldız Technical University School of Foreign Languages. Each returned instrument was reviewed and 367 of them was used for data analysis. A confirmatory factor analysis (CFA) was conducted on 495 students: 115 Faculty of Education students, 50 from the Faculty of Arts and Sciences and 50 from the Vocational School at Adıyaman University; 30 students from Artvin Çoruh University Faculty of Education, 130 from Cumhuriyet University Faculty of Education, and 120 from Marmara University Technical Education Faculty. After reviewing all the questionnaires, 461 were used for data analysis.

Reliability and validity of the scale was achieved using EFA and CFA and a reliable and valid instrument is believed to have been developed for Turkey. The instrument was conducted on 1415 undergraduate students to determine students' perceptions of teaching quality. These were a new data set consisting of undergraduate students: 862 from Adıyaman University, 140 from Çoruh University, 251 from Cumhuriyet University, 67 from Marmara University and 95 from Sakarya University.

Scale Adaptation Process

The researcher obtained permission from Ginns (2007), who developed the original scale. In the simplest translation process a questionnaire is translated (often by unqualified translators) and used without further validation. Another approach involves translation by committee whereby two or more translators work separately or together to produce a consensus questionnaire. This study used the back-translation method, which is the preferred method although it can be time consuming and expensive. In this method a questionnaire is translated into the target language by one translator and then translated back into the source language by an independent translator who is blinded to the original questionnaire. The two source-language versions are then compared (Sperber, 2004, p. 125; Looman and Farrag, 2009, p. 48). Items in the scale were translated into Turkish by the researcher and a linguist who also specializes in Educational Sciences. Another linguist was asked to translate the instrument from Turkish to English, following which the two were compared and any necessary changes were made. To ensure clarity and comprehensibility of the items, the views of 40 Education students at Adıyaman University were considered when revising the questionnaire. To provide content validity, the draft form of the scale was examined by three specialists in the area.

Turkish Adaptation Study of Reliability and Validity of the Scale

The data collection means consists of 24 items focusing on the following five sub scales which aim at determining students' perceptions of quality (Ginns et al., 2007). The Good TeachingScale (GTS) consists of items relating to lecturers' efforts to increase student interest, to give feedback to students' and to motivate and guide students to become successful. The Clear Goals and Standards Scale (CGS) consists of items regarding ways lecturers' determine their lesson standards and explain their expectations to students. The Appropriate Assessment Scale (AAS) consists of items related to assessment methods. The Appropriate Workload Scale (AWS)

consists of items covering lecturers' course preparation time, and the Generic Skills Scale (GSS) includes items which determine the degree to which students' analytic, problem solving and communication skills were developed.

The instrument was tested through EFA to determine its suitability for the Turkish context. The factor structure obtained from the EFA was further tested through the confirmatory factor analysis (CFA). SPSS 15.0 was used for EFA and Lisrel 8.80 was used for CFA (Jörreskog & Sörbom, 1996).

Exploratory Factor Analysis (EFA)

Factor analysis, a complex, multi-step and broadly applied statistical technique (Costello & Osborne, 2005, p. 1), is an approach for expressing hypothetical constructs in the language of mathematics by using a variety of observable indicators that can be directly measured. The analysis is considered exploratory when determining how many constructs (factors) are needed to explain the relationships among the observed indicators is required, and confirmatory when a preexisting model of the relationship among the indicators directs the search (Raykov & Marcoulides, 2000, pp. 94-95). Exploratory analysis allows the exploration of empirical data for characteristic features and interesting relationships without imposing any definite model on the data (Jörreskog & Sörbom, 1993, p. 22).

Exploratory factor analysis (EFA) was used to test validity. Sample size plays an important role in examining statistical techniques (Raykov ve Marcoulides, 2000, p. 27). Two sample groups (367 and 461 students respectively) were used for EFA and CFA analysis. An acceptable sample proportion for CFA is 4:1 or 5:1 for each item (Floyd and Widaman, 1995, p. 289). While there is some debate about optimum sample size (Gorsuch, 1983, Kline, 1979, Cattell, 1978, Comrey and Lee, 1992 cited in: MacCallum et al, 1999, pp.84-85, Hoyle, 1995, p. 93, Schermelleh-Engel et al., 2003, p. 27), this study used a sample scale of 16:1 for EFA and 20:1 for CFA for each item.

In order to test the compatibility of the data for factor analysis, Kaiser-Meyer-Olkin (KMO) and Barlett Sphericity tests were used. The KMO statistic variables are accepted greater than 0.50. Furthermore, values between 0.50 and 0.70 are mediocre, between 0.70 and 0.80 are good, between 0.80 and 0.90 are great and above 0.90 are superb (Hutcheson, Sofroniou, 1999 pp. 224-225). For these data the values are about EFA 0.84 and CFA 0.81, which fall into the great range. Bartlett's (1954) test of sphericity is a notoriously sensitive test of the hypothesis that the correlations in a correlation matrix are zero. The test is available in SPSS factor, but because of its sensitivity and its dependence on sample size the test is likely to be significant with samples of substantial size even if correlations are very low. Therefore, use of the test is recommended only if there are fewer than, say, five cases per variable (Tabachnick & Fidell; 2007, p. 614). For these data, Bartlett's test is highly significant for EFA ($X2(253) =3139,94$; $p<0.01$) and CFA ($X2 (253)= 3083.23$; $p< 0.01$). The data showed the multivariate normal distribution.

In order to reveal the factor design of the scale, Principal Components analysis and Varimax Rotated Component Matrix was chosen as the factor analysis. In applied social science research, orthogonal rotation is used most often, perhaps because it is the default in major statistical programs such as SPSS (varimax rotation), and the perception that orthogonally rotated solutions are more easily interpreted because the factor loadings represent correlations between the indicators and the latent factors (e.g., squaring the factor loading provides the proportion of variance in the indicator that the factor solution explains) (Brown, 2006, p. 31). Analysis showed that 23 items with the eigenvalue above value 1, has the same factor distribution as the original scale.

As for the items' factor loadings, 0.55 is an acceptable level. The magnitude of the factor loading must be at least 0.30 (Barnes et al, 2001, p.81). As a rule of thumb, only variables with loadings of 0.32 and above are interpreted. The greater the loading, the more the variable is a pure measure of the factor. Comrey and Lee (1992) suggest that loadings in excess of 0.71 (50% overlapping variance) are considered excellent, 0.63 (40% overlapping variance) very good, 0.55

(30% overlapping variance) good, 0.45 (20% overlapping variance) fair, and 0.32 (10% overlapping variance) poor. Choice of the cutoff for size of loading to be interpreted is a matter of researcher preference. Sometimes there is a gap in loadings across the factors and, if the cutoff is in the gap, it is easy to specify which variables load and which do not. Other times the cutoff is selected because one can interpret factors with that cutoff but not with a lower cutoff (Comrey & Lee,1 992; Cited in: Tabachnick & Fidell; 2007, p. 649). Analysis with regards to factor design, item factor loadings, total factor variance and item analysis are shown in Table 1.

Table 1. Confirmatory factor analysis of students' perceptions of teaching quality scale in higher education. Figure of factor (vertical rotated -varimax) and items analysis.

Items	Factor Design and Item Loadings					Common Factor Variance	Item Analysis: Correlation		Item Discrimination Feature						Reliability				
							Item Fcator	Item Total	Sub %27 (n=83)		Top %27 (n= 83)		t*		Total (α= .83)				
	F1	F2	F3	F4	F5	(h^2)	r*	Items (α)	r*	$\overline{X}$	Sub Scale (α)	Sd	$\overline{X}$	Sd					
A1	.67	.01	.21	.00	.00	.49	.69	.52		2.12		1.01	3.65	.90	-11.22	.82			
A2	.79	.20	.00	.00	.11	.68	.80	.55		2.08		1.01	3.74	.90	-12.21	.79			
A3	.80	.20	.00	.00	.13	.70	.82	.54		2.21		1.10	3.76	.82	-11.20	.79		.84	
A4	.62	.31	.10	.00	.02	.49	.70	.55		2.28		1.01	3.74	.90	-1070	.82			
A5	.69	.22	.01	.02	.01	.53	.73	.49		2.30		1.04	3.73	.92	-10.22	.81			
A6	.67	.00	.20	.03	.00	.49	.70	.52		2.14		1.05	3.55	1.03	-9.49	.82			
B7	.10	.84	.01	.02	.04	.72	.85	.51		2.44		1.22	3.79	.94	-8.67	.66			
B8	.20	.68	.03	.20	.01	.54	.76	.53		2.61		1.11	3.96	.81	-9.79	.74		.78	
B9	.30	.66	.30	.10	.00	.63	.77	.57		2.34		1.03	3.96	.87	-11.93	.74			
B10	.00	.77	.00	.11	.11	.62	.73	.39		2.47		1.20	3.49	1.02	-6.44	.77			
C11	.00	.11	.81	.20	.12	.72	.85	.26		2.93		1.42	3.69	1.14	-4.13	.06			
C12	.00	.00	.68	.20	.02	.54	.77	.30		3.18		1.40	3.94	1.00	-4.39	.74		.75	
C13	.10	.00	.81	.20	03	.80	.82	.39		2.95		1.37	4.17	.96	-7.29	.64			
D14	.01	.00	.12	.69 0,77	.30	.58 0,66	.76	.37		3.10		1.38	4.18	.95	-6.41	.64			
D15	.02	.00	.00	.79	.20	.34	.78	.30		2.85		1.26	3.74	1.10	-5.29	.06		.71	
D16	.01	.00	.00	.58	.02	.54	.76	.38		2.89		1.25	3.93	1.03	-6.38	.62			
D17	.01	.00	.20	.69	.14	.45	.63	.23		2.95		1.29	3.40	1.14	-2.63	.71			
E18	.20	.20	.00	.00	.61	.58	.64	.48		2.46		1.12	3.83	.94	-9.30	.84			
E19	.00	.10	0.3	.00	.69	.63	.73	.59		2.20		.96	3.87	.79	-13.35	.82			
E20	.00	.20	.00	.00	.77	.64	.78	.53		2.30		1.04	3.75	.83	-10.80	.81		.85	
E21	.00	.20	.10	.00	.77	.62	.80	.58		2.21		1.06	3.80	.82	-11.76	.80			
E22	.00	.30	.10	.00	.72	.60	.77	.56		2.23		1.11	3.69	.93	-10.01	.81			
E23	.10	.20	.00	.00	.74	.49	.77	.50		2.21		1.17	3.60	1.00	-8.94	.82			

*p<.01.

Results analysis showed that items appear under the dimensions defined in the theoretical context. Factor loadings for each sub scale is as follows: GTS between 0.62 and 0.80, CGS between 0.66 and 0.84, AAS between 0.68 and 0.81, AWS between 0.58 and 0.79 and GSS between 0.61 and 0.77 (See Table 1).

There is no relation with the sample and the factor loadings. Guadagnoli and Velicer (1988) challenged such rules and argued that no sound theoretical or empirical basis exists for across-the-board participant-to-variable ratio recommendations. Instead, their Monte Carlo study suggests that variable saturation with the factors, indicated by the size of the factor loadings along with the total sample size and the number of indicators per factor, were important in determining the stability of factor solutions. Most notably, with factor loadings of 0.80, solutions were highly stable across replicated samples regardless of the number of indicators, even with as few as 50 participants. When factor loadings were around the 0.60 range, stable solutions were obtained with sample sizes greater than 150, or with still smaller samples when each component contained at least four variables loading at 0.60. In general, larger samples of 300-400 were needed when the factor loadings were only 0.40 (Floyd & Widaman, 1995, p. 290).

Reliabilty and validity analysis of "Student Course Experience Questionnaire (SCEQ)" showed that sub dimensions were divided under five sub dimensions with 23 items. The distribution of the sub scales are as follows: six items GTS, four items in CGS, three items in AAS, four items in AWS, and six items in GSS. The latest version of the scale showed that the lowest value is 23 and the highest value is 115. High scores obtained from the scale show that students' perceptions are high (items 10, 11, 12, 13, 14, 15 and 17 were reverse coded).

For confirmatory analysis of the scale, in order to determine the usability in the Turkish context, the following tests were applied: Cronbach Alpha coefficient, Spearman Brown split-half correlation, Pearson product moment correlation analysis, corrected item-total correlations and t-test. Table 1 shows that sub dimension correlations range from 0.63 to 0.85; item total correlations range from 0.23 to 0.59. Cronbach Alfa value for the total scale is 0.83; GTS sub scale is 0.84, CGS sub scale is 0.78, AAS sub scale is 0.75, AWS sub scale is 0.71 and GSS sub scale is 0.85.

Generally, reliability coefficients around 0.90 are considered "excellent," values around 0.80 are "very good," and values around 0.70 are "adequate." If r_{XX}< 0.50, most of the observed score variance is due to random error, an unacceptable amount of imprecision in most research (Kline, 2011, p. 70).

Students' perceptions of academicians' teaching quality sub dimension is between 0.10 and 0.61 and total correlation among the sub scales is between 0.60 and 0.80. In empirical studies, a correlation value among the factors equal to 0.85 or less is desirable (Brown, 2006, p. 166). Analysis shows that 23 items fall into four dimensions (eigenvalue= 1), explaining the 59.18 per cent of the variance. In social sciences, a range of 40% to 60% change in variants rates is accepted as sufficient (Scherer, Wiebe, Luther & Adams, 1988), and an explained variance of 60%, and sometimes less, is acceptable (Vieira, 2011, p. 29). Eigenvalue and variance scores for each factor is determined as follows: Factor one; 5.73 and 24.89%, factor two; 3.16 and 13.75%, factor three; 1.87 and 8.13%, factor four; 1.75 and 7.60 % and factor five; 1.11 and 4.81%.

Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis (CFA) is not concerned with discovering a factor structure, but with confirming the existence of a specific factor structure. In this respect, confirmatory factor analysis is considered to be a general modeling approach that is designed to test hypotheses about a factor structure whose number and interpretation are given in advance (Raykov & Marcoulides, 2000, p. 94-95). In confirmatory analysis, on the other hand, one builds a model assumed to describe, explain, or account for the empirical data in terms of relatively few parameters (Jörreskog and Sörbom, 1993, p. 22). The technique of CFA analyzes a priori measurement models in which both the number of factors and their correspondence with the indicators are explicitly specified (Kline, 2011, p.112).

Factor structure was determined through the Explanatory Factor analysis. Five sub dimensions were determnined out of the 23 items. This structure was then tested through Confirmatory Factor Analysis. The overall model fit statistics in Lisrel are within the generally accepted thresholds and suggest an acceptable goodness-of-fit. In fact, although the Chi-square test is significant ($\chi 2 = 612.50$, N=461, p = 0.00), the ratio chi-square/degrees of freedom is below 3 ($\chi 2$=612.50, df = 220,$\chi 2$/df = 2.8) – normally a ratio in the range of 2–1 or 3–1 is indicative of an acceptable fit. In addition, the goodness of fit index (GFI = 0.90), the adjusted goodness of fit index (AGFI = 0.87), the normed fit index (NFI=0.90), the non-normed fit index (NNFI = 0.92), the comparative fit index (CFI = 0.95),and the root mean square error of approximation (RMSEA = 0.06), as well as the standardized root mean square residual (SRMR=.058) indicate good fit (Cote et al., 2001, p.87; Vieira, 201, p. 14; Hooper et al., 2008, p. 58-59; Brown, 2006, p. 156; Schreiber et al., 2006, p. 330; Schermelleh-Engel et al., 2003, p. 52; MacCallum et al., 1996, p. 152-153; Hu & Bentler, 1999, p. 23-29; Baumgartner & Homburg, 1996, p. 150-153). As can be seen in CFA results, the model is acceptable for testing undergraduate students' perceptions of teaching quality.

Research Findings

Undergraduate students' perceptions of teaching quality were analyzed under three problems. The first regarded students' perceptions of lecturers' teaching quality through comparison of students at the faculties of Education, Business Administration, Arts and Sciences, and Vocational School at Adıyaman University. The second analysis is related to comparison of the perceptions of students at Adıyaman, Çoruh, Cumhuriyet, Marmara and Sakarya Universities' Faculty of Education. The third involves in all students' perceptions with regards to certain demographic variables mentioned in the Table below:

Tablo 3. Frequency and percentage distributions revealing students' demographic variables.

Demographics	*Universities*												
	New Established Universities (5 year background)				Developing Universities (20 year background)						Total		General
	Adıyaman		Çoruh		Cumhuriyet		Marmara		Sakarya				
	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Gender													
Female	60.2	494	9.0	74	21.9	180	3.0	25	5.8	48	100.0	821	58.0
Male	62.0	368	11.1	66	12.0	71	7.1	42	7.9	47	100.0	594	42.0
Grade													
Freshmen	76.1	332	7.8	34	6.7	29	4.1	18	5.3	23	100.0	436	30.8
Sophomore	73.1	294	9.2	37	8.0	32	4.2	17	5.5	22	100.0	402	28.4
Junior	50.2	105	16.3	34	14.4	30	7.2	15	12.0	25	100.0	209	14.8
Senior	35.6	131	9.5	35	43.5	160	4.6	17	6.8	25	100.0	368	26.0
Cumulative GPA													
Less than 50	56.7	17	16.7	5	10.0	3	6.7	2	10.0	3	100.0	30	2.1
Between 51-65	49.5	110	18.5	41	9.5	21	10.8	24	11.7	26	100.0	222	15.7
Between 66-75	61.9	375	11.6	70	15.7	95	4.6	28	6.3	38	100.0	606	42.8
Between 76-85	67.6	307	4.6	21	21.8	99	2.0	9	4.0	18	100.0	454	32.1
86 and above	51.5	53	2.9	3	32.0	33	3.9	4	9.7	10	100.0	103	7.3
Class Size													
Between 31-40	69.5	221	11.0	35	11.3	36	2.8	9	5.3	17	100.0	318	22.5

Between 41-50	74.1	340	4.6	21	5.0	23	6.3	29	10.0	46	100.0	459	32.4
50 and above	47.2	301	13.2	84	30.1	192	4.5	29	5.0	32	100.0	638	45.1
Faculties													
Fcaulty of Education	41.3	300	19.3	140	17.1	124	9.2	67	13.1	95	100.0	726	51.3
Certificate Program*	48.8	121	0	0	51.2	127	0	0	0	0	100.0	248	17.5
Faculty of Arts and Sciences	100.0	197	0	0	0	0	0	0	0	0	100.0	197	13.9
Faculty of Business Administration	100.0	104	0	0	0	0	0	0	0	0	100.0	104	7.3
Vocational School	100.0	140	0	0	0	0	0	0	0	0	100.0	140	9.9
Total Distribution	60.9	862	9.9	140	17.7	251	4.7	67	6.7	95	100.0	1415	

*Students who have graduated from Faculties of Arts and Sciences and who take an additional 10 different courses (26 credits) from the Faculty of Education to be certified as teachers.

Table 1 reveals students' demographic variables. Students' preceptions of teaching quality are given in Table 4 below as frequency and percent values as well as mean and standard deviations involving positive (Agree and Strongly Agree) and negative responses (Strongly Disagree and Disagree).

Table 4. Frequency, percentage, mean and standard deviation distributions of students' perceptions of teaching quality

Items Rank	The Student Course Experience Questionnaire (SCEQ) (N=1415)	Strongly Disagree and Disagree		Agree and Strongly Agree			
		%	*f*	%	*f*	$\overline{X}$	Sd.
	Good Teaching Scale (GTS)						
A1	The teaching staff normally give me helpful feedback on how I am going.	43.3	615	33.3	471	2.81	1.14
A2	The teaching staff of this degree course motivate me to do my best work.	41.0	580	39.9	565	2.94	1.19
A3	The staff make a real effort to understand difficulties I may be having with my work.	39.9	508	42.6	603	3.04	1.15
A4	My lecturers are extremely good at explaining things.	27.1	384	47.0	664	3.19	1.10
A5	The teaching staff work hard to make their subjects interesting.	12.3	456	42.7	604	3.09	1.13
A6	The staff put a lot of time into commenting on my work.	41.3	585	30.9	438	2.83	1.19
	Clear Goals and Standards Scale (CGS)						
B7	I have usually had a clear idea of where I am going and what is expected of me in this degree course.	32.4	458	33.4	614	3.11	1.29
B8	It is always easy to know the standard of work expected.	22.8	323	57.6	814	3.40	1.53
B9	The staff made it clear right from the start what they expected from students.	28.1	397	48.3	684	3.22	1.12
B10	It has often been hard to discover what is expected of me in this degree course.*	39.0	552	33.6	485	2.94	1.18
	Appropriate Assessment Scale (AAS)						
C11	The staff seem more interested in testing what I have memorised than what I have understood.*	31.3	434	48.8	690	3.29	1.33
C12	Too many staff ask me questions just about facts.*	22.4	317	58.3	825	3.56	1.18

C13	To do well in this degree all you really need is a good memory.*	20.6	292	64.5	913	3.67	1.19
Appropriate Workload Scale (AWS)							
D14	There is a lot of pressure on me as a student in this degree course.*	34.3	487	47.7	674	3.27	1.28
D15	The workload is too heavy.*	45.3	642	33.5	474	2.90	1.22
D16	I am generally given enough time to understand the things I have to learn.	33.5	460	47.6	673	3.24	1.18
D17	The sheer volume of work to be got through in this degree means it can't all be thoroughly comprehended.*	34.8	543	49.5	558	3.04	1.21
Generic Skills Scale (GSS)							
E18	The degree course has helped me develop my ability to work as a team member.	32,0	452	45,1	639	3,13	1,18
E19	The degree course has sharpened my analytic skills.	29,1	413	48,7	690	3,21	1,18
E20	As a result of my degree course, I feel confident about tackling unfamiliar problems.	30,0	424	44,9	636	3,16	1,15
E21	The degree course has developed my problem-solving skills.	35,3	499	39,8	463	3,02	1,19
E22	The degree course has improved my skills in written communication.	30,0	525	47,0	665	3,17	1,16
E23	My degree course has helped me to develop the ability to plan my own work.	32,1	455	46,4	667	3,14	1,21

*Notes: = reversed item.

Table 4 reveals frequency, percentage, mean and standard deviation values in relation to students' perceptions of teaching quality. 43.3% of students stated that their lecturers do not give feedback and spend less time on their projects (strongly disagree and disagree). However, 47.2% indicated that their lecturers are extremely good at explaining things and 42.7% find their lecturers' efforts satisfactory for attracting students' attraction (Agree and Strongly Agree). 39.9% of the students asserted that courses do not meet their expectations, 57.6% find it easy to understand the standard of work expected. 48.3% thought that staff make it clear right from the start what they expect from students. Students' responses in the assessment scale show that 48.8% of students find that the staff seem more interested in testing what they have memorised than what they have understood. 58.3% indicated that they were questioned about facts. 64.5% believe that having a good memory determines a student's success in their departments. These findings indicate that the educational philosophy of these courses is based on memorization. 45.3% of the students find that the workload is not too heavy. 47.7% believe that there is a lot of pressure on them as students. 47.6% asserted that they are given enough time to understand the things they have to learn. 49.5% indicated they they find it difficult to comprehend the content of the courses in spite of their hard work. 29.1% of students thought that the courses improve their analytical thinking skills, 30.0 % their writing skills, 32.0% their team work skills, and 30.0% that the courses help them acquire skills for dealing with extraordinary problems that could be encountered in the future. At the same time, 35.31% of students noted that they develop planned study skills, and 35.3% problem solving skills.

Findings Related to Adıyaman University

862 students were from the Adıyaman University faculties of Education, Arts and Sciences, Business Administration, the Vocational School and the Teacher Certification Program. A one way Anova Analysis revealed that students' perceptions of teaching quality differ with regards to diffferent faculties and units in the sub dimensions of good teaching [$F(4\text{-}857) = 5.504$, $p < 0.01$], clear goals and standards [$F(4\text{-}857) = 12.02$, $p < 0.01$], appropriate assessment [$F(4\text{-}857) = 7.02$, $p < 0.01$], appropriate work load of students [$F(4\text{-}857) = 11.54$, $p < 0.01$] and generic skills [$F(4\text{-}857) = 2.80$, $p < 0.01$]. Scheffe multi comparisons among the scales showed that students from

the Faculty of Arts and Sciences perceive the teaching performance (feedback to students, motivating students, attracting students attention, guidance and such) as better than the students in other departments and units. Also students believe that they could develop the generic skills better ($p<0.05$). Lecturers at Vocational School appeared to attach less importance on setting clear goals and standards for their students when compared to lecturers in other departments and units ($p<0.05$). Lecturers at the Faculty of Business Administration were found to be the most competent in terms of assessment. However, the opposite situation was observed at the Vocational School ($p<0.05$). Students' work load was perceived as the highest at the Faculty of Business Administration whereas it was the least in Vocational School.

Findings Related to the Faculty of Education

726 students participated in the study from Adıyaman, Çoruh, Cumhuriyet, Marmara ve Sakarya Universities. Significance was found between the Faculty of Education variable and the following sub dimensions: good teaching [$F(4\text{-}721) = 13.31$, $p< 0.01$], appropriate assessment [$F(4\text{-}721) = 2.98$, $p< 0.05$], appropriate work load [$F(4\text{-}721) = 5.66$, $p< 0.01$] and generic skills [$F(4\text{-}721) = 4.55$, $p< 0.01$]. No significance was found with regards to the sub dimension of setting clear goals and standards [$F(4\text{-}721) = 1.88$, $p>.05$]. Scheffe comparisons showed that students from Çoruh University found the teaching quality better but found appropriate assessment less satisfactory ($p<0.05$). The university's being newly established could be the reason for this finding. Also there may not be sufficient assessment experts in the faculty teaching team. Sakarya University students have the highest work load, yet Çoruh University students believe that they acquire generic skills more when compared to other universities ($p< 0.05$). No meaningful difference among the universities was found with regards to students' perceptions of the sub scale of setting clear goals and standards ($p> 0.05$). No significant difference was determined between classroom size and the sub dimensions. In addition students' grades did not differ with regards to the sub dimensions ($p> 0.05$). However, there is a meaningful difference between students' academic success and their perceptions of teaching quality [$F(4\text{-}721) = 4.83$, $p< 0.01$], and significant difference was also observed between good teaching sub dimensions and the students' work load [$F(4\text{-}721) = 5.48$, $p< 0.01$]. Students whose grades fell into the range of 51-65 found their lecturers' teaching performance better when compared to students who have better academic success rates ($p< 0.05$). Students' whose grades were 50 and below perceived their work load as higher than students who were more sucessful academically ($p< 0.05$).

Findings Related to All Students

A significant finding was observed between newly established universities (five years) and the other universities (20 years) in the sub scale AAS [$t(1413)= -2.25$, $p< 0.01$]. Students who studied at the l earlier established universities ($\overline{X} = 10.80$) appeared to be more satisfied with their lecturers' assessments when compared to students' perceptions from newly established universities ($\overline{X} =10.40$). No difference was observed with regards to gender variable ($p >.01$). The perceptions of teaching quality of students who were enrolled on the Teaching Certificate Program differed according to the seniority of the university's establishment [$t (246)= -2.18$, $p< 0.05$]. Students who continue on the Teacher Certificate Program at Cumhuriyet University ($\overline{X} =10.77$) perceived teaching quality as higher than the students from Adıyaman University ($\overline{X} =10.20$). Cumhuriyet University has an older institutional background whereas Adıyaman University is a newly established university. Mean scores in the sub scales (based on total number of students' responses) of Teaching Quality sub scale is as follows: GTS ($\overline{X} = 2.98$), AWS ($\overline{X} =3.11$), GSS ($\overline{X} = 3.14$), (CGS) ($\overline{X} = 3.17$) and AAS ($\overline{X} = 3.51$). The lowest mean score was determined in the GTS at $\overline{X} = 2.98$. This score was determined to be $\overline{X} =3.30$ at Çoruh University; $\overline{X} =2.94$ at Adıyaman University; $\overline{X} =2.91$ at Cumhuriyet University; $\overline{X} =2.89$ at Sakarya University and $\overline{X} =2.88$ at Marmara University. This finding shows that there is no meaningful difference between the senior and newly established universities in terms of teaching quality.

Mean scores in the teaching quality scale were providing appropriate feedback ($\overline{X}$ = 2.81), allocating enough time for homework and projects ($\overline{X}$ = 2.83), motivating students $\overline{X}$ = 2.94). As for having a strong memory to be successful, the mean score was $\overline{X}$ =3.56. The mean score of students indicating that they were expected to memorize was $\overline{X}$ =3.29. These findings show that three items lower than a score of 3.00 need to be higher whereas the latter two items, which are higher than 3.00, need to be lower. Items which are higher are the items which were reverse coded during the coding process. As a result of these findings, it could be said that teaching at the sample universities according to students' perceptions is based on memorization rather than creativity.

Discussion

OECD (2003) report on the changing patterns of leadership argues that universities need to "develop a creative balance between academic missions and executive capacity; and between financial viability and traditional values" (p. 59). Within this paradigm, teaching and learning at higher education has strategic importance. This study is expected to provide a snapshot of undergraduate students' perceptions of teaching at their universities. It was revealed in undergraduate students' responses that educational philosophy of the courses is based on memorization rather than interpretation and sysnthesis. This could be related with the work load of the lecturers as well as the number of students in each classroom. Almost half of the students asserted that their lecturers do not give feedback and spend less time on their projects. This finding needs to be explored in detail to provide better learning opportunities for the students. On the other hand, almost half of the students indicated that their lecturers are extremely good at explaining things and they seem to appreciate their lecturers' efforts to attract students' attention. It could be thought from these findings that students are satisfied with their lecturers' competency but the degree of interaction and communication could be limited. Further qualitative studies could examine experiences of students and lecturers in an in depth manner. In addition to instruction, syllabi and curriculum also serve as main pillars in an undergraduate program's success. Around 35 per cent of students indicated that they could develop their study skills and problem solving skills in their courses. It could be suggested based on the findings that department curricula and lecturers' syllabi need to be redesigned in a way that better develop students' generic skills. Also, lecturers need to enrich their courses through various methods and approaches such as active learning, collaborative learning, problem based teaching, question and answer and such. Biggs (1999) argues that higher quality teaching comes as a result of a constructive alignment of various aspects of the system. Prosser et al., (2003) emphasize the importance of student-focused methods rather than information transmission and teacher-focused approaches to teaching and showed empirical evidence for this method. Similarly, Dochy et al (2005) reveal the positive impact of problem based approaches on teaching. In this context, teaching and learning could be perceived as two integrated parts which feed one another. Similarly, Ramsden et al., (2007) shows "evidence of a direct relationship between the way university teachers approach their teaching and the way their students approach their learning" (p. 154).

University comparisons showed that students studying at Çoruh University found the teaching quality better. However they found assessment methods less satisfactory when compared with other university students. Being a newly established university might have provided better learning opportunities at Çoruh university. Follow up studies focusing on different learning opportunities provided at various universities across Turkey could give insights to the notion of "learning and teaching in higher education". It should also be noted that teaching in higher education is extended on a wide spectrum starting from the actual teaching in class to learning support services within the campus. Therefore teaching and learning in higher education should be perceived as a whole and students should be put at the center of all planning activities. In line with this idea Bakioğlu and Hacıfazlıoğlu (2010) note that establishing a collaborative culture at faculties, where students can participate in the planning and decision making processes, can

help administrators to develop a system that encourages students' sense of belonging as well as cultivating academics' sense of professionalism. Similarly, Ramsden et al (2007) argue that the experience of leadership for teaching and a collegial commitment to enhancing student learning were found to be associated with high quality teaching and to lecturers' approaches to teaching. Ramsden et al. (1989) also suggested that the support of academic leaders might provide the platform from which to cultivate commitment among colleagues. "Such a commitment, as perceived by the individual lecturer, might be associated with a more positive view of contextual issues such as perceptions of the characteristics of students and the impact of class size on teaching methods "(Ramsden et al., 2007, p. 149).

Mean scores in the teaching quality scale were determined to be low in the sub scales of providing "appropriate feedback, allocating enough time for homework and projects and motivating students". This finding reveals a hidden constaint experienced at academics' competency in teaching. As it was asserted by Hacıfazlıoğlu (2010), academics deal with finding a balance between "teaching and research". It was revealed in the reflections of the academics in the mentioned study that academics need "professional support and mentorship" in order to channel their research experiences into their teaching. When the context of PhD education is considered at universities in Turkey, academicians take only two educational courses (Development and Learning and Planning and Assessment in Education) within the context of their PhD process. However, the number of these courses should be increased. At the same time, in service training seminars should be provided to academicians at various phases of their career, excluding those in the field of education or related fields since their programs are embedded with educational courses.

Assessment and evaluation appears to be implemented only by the academicians from the Fields of Assessment and Evaluation, yet all academicians need to be provided with courses and in service training. The number of programs focusing on assessment and evaluation is limited in universities across Turkey. Biggs (2003) also asserts that the dimensions of teaching, learning and assessment are inseparable (p. 11). Parpala and Ylänne (2007) found in their study that assessment is considered separate from teaching despite being an essential part of good teaching.

This study examined public university students' perceptions. Bakioğlu and Hacıfazlıoğlu (2007) assert that while many universities accept and apply "quality" to research and teaching related facilities, there are still some universities which use quality to attract more students via mass media. This study did not analyse this perspective but the ways in which quality is used as a marketing strategy should be investigated in further studies.

Financial constraints on academicians taking additional classes might be one of the barriers which effect the quality of education. Academicians are expected to renew their teaching skills in line with recent developments ranging on a wide spectrum from technology to internalization issues. They are expected to attend professional development workshops, seminars and other training to develop their teaching capacities. Unfortunately, circumstances seem to prevent them from attending such professional activities. In this context limited time and energy prevent them from being proactive in such activities. Hacıfazlıoğlu and Özdemir (2010) note that the notion of instructional leadership should be embedded into the culture of the university. In this study students' responses revealed the hidden constraints are experienced by academicians working at public universities. In higher education professional development training and seminars are common in many countries such as those in Europe, Canada and the United States. As it was asserted by Ryan and Fraser (2010), educational development roles need to be both centrally based and distributed throughout the institution, and that those staff need to engage in professional development specific to the profession of educational development.

Conclusion

This study brought perspectives of undergraduate students about teaching quality. The results revelaed that students' perceptions differ with regard to the university's back ground. It appeared that students seemed to be more statisfied at older universities when compared with those studying at newly established universities. Students' perceptions revealed that they are inclined to pursue their courses in a way that spurs their creativity and critical thinking. Therefore university administration needs to take the necessary action to increase teaching quality at their universities.

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EK: Ölçeğin Türkçe Formu

Maddeler	Üniversite Öğrencilerinin Öğretimin Kalitesini Değerlendirme Ölçeği	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
İyi Öğretim Alt Ölçeği						
A1	Öğretim elemanları, ders performansımın nasıl olduğu konusunda geribildirimde bulunurlar.	1	2	3	4	5
A2	Öğretim elemanları, derslerimde daha başarılı olmam konusunda motive ederler.	1	2	3	4	5
A3	Öğretim elemanları, derslerimde karşılaşabileceğim güçlükleri aşmam konusunda yol gösterirler.	1	2	3	4	5
A4	Öğretim elemanları, öğrettikleri konuları açıklamada oldukça iyidirler.	1	2	3	4	5
A5	Öğretim elemanları, derslerini daha ilgi çekici hale getirmek için yoğun çaba harcarlar.	1	2	3	4	5
A6	Öğretim elemanları, çalışmalarımı değerlendirmek için çok zaman harcarlar	1	2	3	4	5
Açık Hedefler ve Standartlar						
B7	Nereye gittiğim ve derslerden neler beklendiği konusunda daima açık bir fikre sahibim.	1	2	3	4	5
B8	Çalışmalarımız konusundaki beklenen standardı bilmek daima çok kolay (ödev, proje, vs.).*	1	2	3	4	5
B9	Öğretim elemanları dönem başında öğrencilerden neler beklediklerini net bir şekilde belirlerler.	1	2	3	4	5
B10	Derslerde benden neyin beklendiğini anlamak zordur.*	1	2	3	4	5
Uygun Değerlendirme						
C11	Öğretim elemanları dersten ne anladığımdan çok neyi ezberlediğimi değerlendirmekle daha çok ilgili görünüyorlar.*	1	2	3	4	5
C12	Öğretim elemanlarının çoğu, bire bir karşılığı olan soruları/gerçekleri sorarlar.*	1	2	3	4	5
C13	Bölümümde başarılı olmak için gerçekten ihtiyacın olan tek şey iyi bir hafızadır.*	1	2	3	4	5
Uygun Ders Yükü						
D14	Bu bölümde öğrenci olarak üzerimde çok fazla yük var (proje, ödev, sınav ve diğer faaliyetler konusunda) *	1	2	3	4	5
D15	Ders yüküm kaldıramayacağım kadar ağır.*	1	2	3	4	5
D16	Alanımla ilgili anlamam gereken konuları öğrenmek için genellikle yeterli zaman verilir.	1	2	3	4	5
D17	Bölüm derslerinde şu ana kadar yapılması gereken bütün etkinlikleri yapmam,bu dersleri tam olarak anladığım anlamına gelmez.*	1	2	3	4	5
Genel Beceriler						
E18	Aldığım dersler takımla/grupla çalışma becerilerimin gelişmesine katkı sağlamaktadır.	1	2	3	4	5
E19	Aldığım dersler analitik düşünme yeteneğimi geliştirmiştir (*analiz, sentez ve eleştirel düşünme becerileri)*	1	2	3	4	5
E20	Aldığım dersler yeni problemleri çözme konusunda kendime güvenimi artırmıştır.	1	2	3	4	5
E21	Aldığım dersler gelecekte problem çözme becerilerimi geliştirmektedir.	1	2	3	4	5
E22	Aldığım dersler yazılı iletişim becerilerimi geliştirmektedir.	1	2	3	4	5
E23	Aldığım dersler, çalışmalarımı planlama yeteneğini geliştirmeme yardım etmektedir.	1	2	3	4	5

*Olumsuz maddeler.